

Twelfth Census of the United States.

# CENSUS BULLETIN.

No. 139.

WASHINGTON, D. C.

February 13, 1902.

## AGRICULTURE.

### MAINE.

HON. WILLIAM R. MERRIAM,  
*Director of the Census.*

SIR: I have the honor to transmit herewith, for publication in bulletin form, the statistics of agriculture for the state of Maine, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that—

The schedules relating to agriculture shall comprehend the following topics: Name of occupant of each farm, color of occupant, tenure, acreage, value of farm and improvements, acreage of different products, quantity and value of products, and number and value of live stock. All questions as to quantity and value of crops shall relate to the year ending December thirty-first next preceding the enumeration.

A "farm," as defined by the Twelfth Census, includes all the land, under one management, used for raising crops and pasturing live stock, with the wood lots, swamps, meadows, etc., connected therewith. It also includes the house in which the farmer resides, and all other buildings used by him in connection with his farming operations.

The farms of Maine, June 1, 1900, numbered 59,299, and had a value of \$96,502,150. Of this amount \$47,142,700, or 48.9 per cent, represents the value of buildings, and \$49,359,450, or 51.1 per cent, the value of land and improvements other than buildings. On the same date the value of farm implements and machinery was \$8,802,720, and of live stock, \$17,106,034. These values, added to that of farms, give the "total value of farm property," \$122,410,904.

The products derived from domestic animals, poultry, and bees, including animals sold or slaughtered on farms, are referred to in this bulletin as "animal products." The total value of all such products, together with the value of all crops, is termed "total value of farm prod-

ucts." This value for 1899 was \$37,113,469, of which amount \$15,159,415, or 40.8 per cent, represents the value of animal products, and \$21,954,054, or 59.2 per cent, the value of crops, including forest products. The total value for 1899 exceeds that reported for 1889 by \$15,064,249, or 68.3 per cent. A large part of this apparent increase is doubtless due to a more detailed enumeration in 1900 than in 1890. Of the actual increase, the greater part has been in the products of market gardens, dairies, and poultry farms.

The value of "net farm products," or the "gross farm income," is obtained by deducting from the "total value of farm products" the value of the products fed to live stock on the farms of the producers. In 1899 the reported value of products fed was \$9,847,860, leaving \$27,265,609 as the gross farm income. The percentage which this amount is of the "total value of farm property" is referred to in the text of the bulletin as the "percentage of gross income upon investment." For Maine in 1899 it was 22.3 per cent.

As no reports of expenditures for taxes, interest, insurance, feed for stock, and similar items have been obtained by any census, no statement of net farm income can be given.

The statistics presented in this bulletin will be treated in greater detail in the final volume, "Statistics of Agriculture for the United States," which will be published about June 1, 1902. The present publication is designed to present a succinct advance statement for Maine.

Very respectfully,

*L. G. Powers.*

*Chief Statistician for Agriculture.*

# AGRICULTURE IN MAINE.

## GENERAL STATISTICS.

Maine has a total land area of 29,895 square miles, of which 9,844 square miles, or 32.9 per cent, are included in farms. The surface consists of two great slopes, the northern and the southern. The northern slope, comprising about one-third of the total area, is drained by the St. John River and its tributaries, and the southern slope by numerous streams which flow into the Atlantic. The broad, flat divide which separates the two slopes serves as a natural reservoir, most of the rivers of the state having their sources in the large lakes of this region. Some of the lakes have outlets on both sides of the watershed.

The surface of a large part of the state is rugged and broken. The soil of the river valleys is very productive, but in the mountainous regions and along the seacoast it is for the most part sterile. The Aroostook Valley, which comprises the largest area of fertile farming land in New England, has a deep, porous, yellow loam, especially adapted to the growing of fruits and vegetables. The remarkable development of this part of the state in the past ten years is an important feature revealed by the statistics presented in this bulletin.

### NUMBER AND SIZE OF FARMS.

The following table gives, by decades since 1850, the number of farms, the total and average acreage, and the per cent of farm land improved.

TABLE 1.—FARMS AND FARM ACREAGE: 1850 TO 1900.

YEAR.	Number of farms.	NUMBER OF ACRES IN FARMS.				Per cent of farm land improved.
		Total.	Improved.	Unimproved.	Average.	
1900.....	59,299	6,299,946	2,386,889	3,913,057	106.2	37.9
1890.....	62,013	6,179,925	3,044,066	3,135,859	99.7	49.8
1880.....	64,309	6,552,678	3,484,908	3,067,770	101.9	58.2
1870.....	59,804	5,838,658	2,917,793	2,920,865	97.6	60.0
1860.....	55,685	5,727,671	2,704,188	3,023,483	102.8	47.2
1850.....	46,760	4,655,395	2,039,596	2,615,797	97.4	44.8

The number of farms in 1900 was 12,539 greater than in 1850, a gain of 26.8 per cent. Since 1880, however, the number has been decreasing, the loss for the past decade having been 2,714 farms, or 4.4 per cent.

Except in the decade 1880-1890, the total farm acreage has increased steadily since 1850. An increase since 1890 of 120,021 acres, accompanying the decrease in the number of farms, resulted in a gain of 6.5 acres in the average size of farms, which was larger in 1900 than at any previous time.

The acreage of improved land increased steadily until 1880, when a marked decline began, and in 1900 the per-

centage of farm land improved was smaller than ever before reported. This change, although less marked than in other New England states, is doubtless due to the same general causes, namely, the demands of a growing city population for the products of special branches of agriculture, notably dairying and market gardening, and the competition of western land in cereal production. The lands which are most fertile and most easily tilled have been retained under cultivation and made increasingly productive. As a result, the aggregate income derived from meadow, orchard, and plow lands is now greater than it was in 1860, although the acreage under cultivation is considerably less. The less fertile lands have been found to afford greater incomes as permanent pastures than as meadow or plow lands, and each decade since 1870 has shown an increasing acreage of such land reported as unimproved.

### FARM PROPERTY AND PRODUCTS.

Table 2 presents a summary of the principal statistics relating to farm property and products for each census year, beginning with 1850.

TABLE 2.—VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND OF FARM PRODUCTS: 1850 TO 1900.

YEAR.	Total value of farm property.	Land, improvements, and buildings.	Implements and machinery.	Live stock.	Farm products. <sup>1</sup>
1900.....	\$122,410,904	\$96,502,150	\$8,802,720	\$17,106,034	\$37,113,469
1890.....	122,847,289	88,567,730	5,499,413	18,280,140	22,040,220
1880.....	123,805,080	102,357,615	4,948,048	16,499,376	21,945,489
1870.....	131,123,193	102,961,951	4,809,113	23,857,129	33,470,044
1860.....	97,424,385	78,088,525	3,298,327	15,437,533	
1850.....	66,852,031	54,861,748	2,284,557	9,705,726	

<sup>1</sup> For year preceding that designated.

<sup>2</sup> Values for 1870 were reported in depreciated currency. To reduce to specie basis of other figures they must be diminished one-fifth.

<sup>3</sup> Includes betterments and additions to live stock.

The value of farm property in 1900 was nearly twice as great as in 1850, although the gain in the decade 1890-1900, was less than one-tenth of 1 per cent. In this decade there was a slight decrease in the value of land, improvements, and buildings, and also in that of live stock, but in the value of implements and machinery there was a gain of 60.1 per cent. A portion of this increase, however, is doubtless the result of a more detailed enumeration in 1900 than heretofore.

### COUNTY STATISTICS.

Table 3 gives an exhibit of general agricultural statistics by counties.

TABLE 3.—NUMBER AND ACREAGE OF FARMS, AND VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, JUNE 1, 1900, WITH VALUE OF PRODUCTS OF 1899 NOT FED TO LIVE STOCK, AND EXPENDITURES IN 1899 FOR LABOR AND FERTILIZERS, BY COUNTIES.

COUNTIES.	NUMBER OF FARMS.		ACRES IN FARMS.		VALUES OF FARM PROPERTY.				Value of products not fed to live stock.	EXPENDITURES.	
	Total.	With build-ings.	Total.	Improved.	Land and improve-ments (ex-cept build-ings).	Buildings.	Imple-ments and machinery.	Live stock.		Labor.	Fertili-zers.
The State -----	59,299	58,136	6,290,946	2,386,889	\$49,859,450	\$47,142,700	\$8,802,720	\$17,106,034	\$27,265,009	\$2,667,260	\$819,680
Androscoggin-----	2,924	2,900	257,400	125,701	2,897,270	3,045,050	470,650	906,907	1,574,033	170,710	46,840
Aroostook-----	6,988	6,781	793,205	389,232	6,863,290	4,274,020	1,325,440	2,220,671	4,553,169	473,010	268,700
Cumberland-----	5,101	5,030	408,946	148,436	5,371,850	5,067,720	775,840	1,303,913	2,509,406	274,100	67,480
Franklin-----	2,526	2,462	393,870	154,051	1,774,550	1,713,230	316,300	874,136	1,038,486	98,290	22,790
Hancock-----	2,784	2,747	274,390	61,853	1,783,450	1,895,510	316,580	571,943	912,518	91,200	16,940
Kennebec-----	5,523	5,249	479,749	180,994	4,650,850	4,846,950	776,510	1,564,277	2,258,618	236,250	56,270
Knox-----	2,115	2,091	156,480	47,091	1,607,890	1,682,720	249,970	477,548	767,607	72,320	10,560
Lincoln-----	2,808	2,770	223,069	58,480	1,649,490	1,851,050	324,540	582,060	884,035	59,290	14,840
Oxford-----	4,420	4,320	620,704	198,474	3,604,620	3,478,880	576,660	1,443,731	2,000,323	181,690	45,390
Penobscot-----	6,076	6,007	662,671	238,240	4,496,330	4,845,340	999,020	2,011,128	2,787,258	263,690	68,700
Piscataquis-----	1,935	1,888	265,180	104,223	1,325,130	1,382,870	310,730	632,232	858,652	85,520	24,270
Sagadahoc-----	1,238	1,221	115,043	39,279	973,950	1,052,990	174,840	299,840	555,006	61,830	19,200
Somerset-----	4,122	4,068	579,301	240,474	3,093,080	3,199,150	601,210	1,436,540	1,808,907	186,060	52,160
Waldo-----	3,674	3,637	381,531	155,789	2,326,690	2,535,680	526,710	974,968	1,544,808	128,840	29,630
Washington-----	2,051	2,022	248,782	54,919	1,232,670	1,225,490	278,890	479,714	753,171	64,370	14,070
York-----	5,064	4,954	438,625	141,208	5,808,810	5,045,990	778,890	1,327,431	2,399,612	225,090	62,140

For the 7 counties which reported more farms in 1900 than in 1890, the percentages of increase are as follows: Aroostook, 12.3; Kennebec, 5.6; Androscoggin, 2.2; Sagadahoc, 1.4; Franklin, Knox, and Oxford each less than 1 per cent. The counties reporting the largest relative decreases were Hancock, Washington, Waldo, and Penobscot, the percentages being 28.4, 16.9, 10.7, and 9.2, respectively.

The portion of the total land surface included in farms varied from 11.4 per cent in Piscataquis county to 85.2 per cent in Kennebec county, and the average size of farms, from 74 acres in Knox county to 156 acres in Franklin county.

The total acreage in farms increased in the last decade in every county except Hancock, Washington, Piscataquis, and Somerset, which reported decreases of 10.6 per cent, 8.9 per cent, 4.0 per cent, and 0.5 per cent, respectively. The greatest relative increase, 9.7 per cent, occurred in Aroostook county, which was the only county that reported a larger acreage of improved land in 1900 than in 1890. In 1900 the per cent of improved farm land varied from 18.7 in Hancock county to 49.1 in Aroostook county.

All counties except Androscoggin, Aroostook, and Oxford show decreases since 1890 in the value of farms. With the exception of the increase of 48.1 per cent in Aroostook county, and the decreases of 21.7 per cent and 20.2 per cent in Hancock and Waldo counties, respectively, the changes were slight. The average value of farms varied from \$1,199 in Washington county to \$2,144 in York county. In the south-central part of the state the value of the farm buildings exceeds that of the land. Elsewhere the reverse is true, especially in Aroostook county and in the extreme southeastern part of the state.

The value of implements and machinery increased greatly in every county. In Aroostook county it was more than three times as large in 1900 as in 1890. The average value per farm ranged from \$114 in Hancock county to \$191 in Aroostook county.

The only counties in which the value of live stock increased are Aroostook and Sagadahoc, where gains of 18.5 per cent and 1.2 per cent, respectively, were reported. The most marked decrease occurred in Washington county, and amounted to 21.7 per cent.

The average value per farm of the products of 1899 not fed to live stock ranged from \$315 in Lincoln county to \$656 in Aroostook county. The average value per acre was greatest in Cumberland, where it was \$6.14, and least in Franklin, where it was \$2.64.

The average expenditure per farm for labor, including value of board furnished, varied from \$21 in Lincoln county to \$68 in Aroostook county. Waldo and Washington counties each reported a smaller expenditure for fertilizers than in 1890. All other counties show increases, the amounts reported by Hancock and Aroostook counties in 1900 being three and five times, respectively, as great as the amounts reported in 1890. The average expenditures per farm varied from \$5 in Lincoln and Knox counties to \$39 in Aroostook county. The general use of commercial fertilizers in recent years in the growing of potatoes accounts for the relatively large expenditure in the latter county.

#### FARM TENURE.

Table 4 gives a comparative exhibit of farm tenure for 1880, 1890, and 1900. In Table 5 the tenure of farms for 1900 is given by race of farmer, and "farms operated by owners" are subdivided into groups designated as "owners," "part owners," "owners and tenants," and "managers." These terms denote, respectively: (1) Farms operated by individuals who own all the land they cultivate; (2) farms operated by individuals who own a part of the land and rent the remainder from others; (3) farms operated under the joint direction and by the united labor of two or more individuals, one owning the farm or a part of it, and the other, or others, owning no part, but receiving for supervision or labor a share of the products; and (4) farms

operated by individuals who receive for their supervision and other services a fixed salary from the owners.

TABLE 4.—NUMBER AND PER CENT OF FARMS OF SPECIFIED TENURES: 1880 TO 1900.

YEAR.	Total number of farms.	NUMBER OF FARMS OPERATED BY—			PER CENT OF FARMS OPERATED BY—		
		Owners. <sup>1</sup>	Cash tenants.	Share tenants.	Owners. <sup>1</sup>	Cash tenants.	Share tenants.
1900	59,299	56,524	2,080	745	95.3	3.4	1.3
1890	62,013	58,643	1,976	1,394	94.6	3.2	2.2
1880	64,809	61,628	1,628	1,153	95.7	2.5	1.8

<sup>1</sup> Including "part owners," "owners and tenants," and "managers."

TABLE 5.—FARMS OF SPECIFIED TENURES, JUNE 1, 1900, CLASSIFIED BY RACE OF FARMER.

RACE.	Total number of farms.	Owners.	Part owners.	Owners and tenants.	Managers.	Cash tenants.	Share tenants.
The State	59,299	54,263	775	569	917	2,080	745
White	59,270	54,237	774	569	916	2,029	745
Colored <sup>1</sup>	29	26	1		1	1	

<sup>1</sup> Including 5 Indians.

The number of farms operated by owners has decreased 5,004 since 1880, but, as the total number of farms has also decreased, the percentage of farms operated by owners has not materially changed. The total number of tenant-operated farms, June 1, 1900, varied but 6 from the number reported twenty years before. Within the class, however, there has been a significant change in the intervening years, the number of share tenants having decreased 35.4 per cent, while the number of cash tenants increased in a corresponding degree. In 1880, 41.5 per cent of all tenants were share tenants, while in 1900 only 26.8 per cent were of this class. The change in the relative number of cash and share tenants is the result of a growing sentiment on the part of both landlord and tenant in favor of the cash-payment system, and indicates greater independence and financial responsibility on the part of the tenant class as a whole. Considered as evidence of agricultural progress, the significance of this change is enhanced by the fact that the greatest relative numbers of share tenants are found in the most recently developed and least improved sections of the state. In Aroostook county 42.9 per cent of all tenants are share tenants, while in Cumberland county the corresponding per cent is but 19.7.

No previous census has reported the number of farms operated by "part owners," "owners and tenants," or "managers," but it is believed that the number conducted by the last-named class is constantly increasing.

#### OWNERSHIP OF RENTED FARMS.

The ownership of 2,633 of the 2,775 rented farms in Maine was ascertained by the enumerators; that of 142 was unreported. The titles to the 2,633 farms are vested in 2,563 owners, an average of about 103 farms to every 100 owners. Of the 2,563 owners, 2,510 possess 1 farm each; 45, 2 each; 6, 3 each; and the remaining 2 own 4 and 11 farms, respectively.

Of the 2,563 owners, 2,165, possessing 2,235 farms, reside in Maine. The owners of 1,868 of these farms live in the counties in which their farms are located. Of the non-resident owners 396 live in the North Atlantic states; 5, in the South Atlantic states; 14, in the North Central states; 32, in the Western states; 1, in a South Central state; and 10, in foreign countries. None of them possess more than one farm. The total value of the 398 farms owned by these nonresidents was \$719,675, an average of \$1,808. This amount is so small as to make it apparent that few, if any, of the nonresident owners derive their support from farms in Maine.

Of the 2,775 rented farms, only 5 are worth \$25,000 or over. These 5 farms have an aggregate value of \$157,800, an average of \$31,560. Eighteen rented farms are worth between \$10,000 and \$25,000 each, their aggregate value being \$229,200, and their average value \$12,733. The remaining 2,752 rented farms have a total value of \$3,576,160. As the average value of these farms is but \$1,299, it is evident that the number of landlords in Maine who are supported by the incomes from their rented farms is very small.

#### FARMS CLASSIFIED BY RACE OF FARMER AND BY TENURE.

Tables 6 and 7 present the principal statistics for farms classified by race of farmer and by tenure.

TABLE 6.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY RACE OF FARMER AND BY TENURE, WITH PERCENTAGES.

RACE OF FARMER, AND TENURE.	Number of farms.	NUMBER OF ACRES IN FARMS.			VALUE OF FARM PROPERTY.	
		Average.	Total.	Per cent.	Total.	Per cent.
The State	59,299	106.2	6,299,946	100.0	\$122,410,904	100.0
White farmers	59,270	106.3	6,298,591	100.0	122,388,944	100.0
Colored farmers <sup>1</sup>	29	46.7	1,355	( <sup>2</sup> )	27,060	( <sup>2</sup> )
Owners	54,263	105.3	5,712,303	90.7	100,959,024	89.8
Part owners	775	168.7	130,704	2.1	2,334,770	1.9
Owners and tenants	569	133.4	75,910	1.2	1,614,390	1.3
Managers	917	138.0	126,697	2.0	3,668,370	3.0
Cash tenants	2,080	86.9	176,491	2.8	3,536,510	2.9
Share tenants	745	104.7	77,996	1.2	1,297,840	1.1

<sup>1</sup> Including 5 Indians.

<sup>2</sup> Less than one-tenth of 1 per cent.

TABLE 7.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY RACE OF FARMER AND BY TENURE.

RACE OF FARMER, AND TENURE.	AVERAGE VALUES PER FARM OF—					Per cent of gross income on total invest- ment in farm property.
	Farm property, June 1, 1900.				Gross income (products of 1899 not fed to live stock).	
	Land and im- prove- ments (except build- ings).	Build- ings.	Imple- ments and ma- chinery.	Live stock.		
The State-----	\$832	\$795	\$148	\$289	\$460	22.8
White farmers-----	833	795	148	289	460	22.8
Colored farmers <sup>1</sup> -----	440	333	52	108	265	28.4
Owners-----	808	785	147	286	457	22.5
Part owners-----	1,844	1,024	231	414	743	24.7
Owners and tenants-----	1,080	1,062	218	477	729	25.7
Managers-----	1,835	1,509	228	428	591	14.8
Cash tenants-----	802	636	97	207	331	19.0
Share tenants-----	756	646	119	221	376	21.6

<sup>1</sup> Including 5 Indians.

The value of the farm property of the 24 negroes who operate farms in Maine is \$24,915, and that of the 5 Indian farmers, all of whom are owners, is \$2,145.

Farms operated by "part owners" have the largest average area, 168.7 acres, and those operated by "cash tenants" the smallest, 86.9 acres. Of the 114 farms containing 1,000 acres each or over, 99 are operated by "owners;" 6, by "managers;" 5, by "part owners;" 3, by "share tenants;" and 1, by an "owner and tenant."

Many of the farms operated by managers are adjuncts of public institutions. Such farms, as a rule, are favorably located and highly improved, and the average values of the several classes of farm property are generally larger for this than for any other group of farms classified by tenure. The ratio which the gross income of these farms bears to the total value of their farm property is, however, smaller than for the other groups. This is due to the high average valuation of land and buildings, and to the fact that many of these farms are not cultivated primarily for profit.

#### FARMS CLASSIFIED BY AREA.

Tables 8 and 9, for farms classified by area, present facts corresponding to those given in Tables 6 and 7 for farms classified by race of farmer and by tenure.

TABLE 8.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY AREA, WITH PERCENTAGES.

AREA.	Num- ber of farms.	NUMBER OF ACRES IN FARMS.			VALUE OF FARM PROPERTY.	
		Average.	Total.	Per cent.	Total.	Per cent.
The State.....	59,299	106.2	6,299,945	100.0	\$122,410,904	100.0
Under 3 acres.....	375	2.8	1,034	(1)	441,290	0.4
3 to 9 acres.....	2,042	7.8	14,933	0.2	2,454,250	2.0
10 to 19 acres.....	2,890	14.1	40,990	0.7	3,752,260	3.1
20 to 49 acres.....	9,267	34.8	317,827	5.0	13,131,150	10.7
50 to 99 acres.....	13,644	69.6	1,297,754	20.6	31,386,890	25.7
100 to 174 acres.....	17,131	123.8	2,127,893	33.8	39,178,374	32.0
175 to 259 acres.....	6,682	207.0	1,171,767	18.6	17,999,050	14.2
260 to 499 acres.....	2,598	322.5	837,867	12.3	10,301,900	8.4
500 to 999 acres.....	516	594.4	306,709	4.9	2,951,890	2.4
1,000 acres and over.....	114	1,615.5	184,172	2.9	1,380,850	1.1

<sup>1</sup> Less than one-tenth of 1 per cent.

TABLE 9.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY AREA.

AREA.	AVERAGE VALUES PER FARM OF—					Per cent of gross income on total invest- ment in farm property.
	Farm property, June 1, 1900.				Gross income (products of 1899 not fed to live stock).	
	Land and im- prove- ments (except build- ings).	Build- ings.	Imple- ments and ma- chinery.	Live stock.		
The State.....	\$832	\$795	\$148	\$289	\$460	22.3
Under 3 acres.....	860	706	46	65	300	25.5
3 to 9 acres.....	391	674	60	92	175	14.4
10 to 19 acres.....	457	651	76	114	185	14.2
20 to 49 acres.....	542	625	95	155	268	18.9
50 to 99 acres.....	661	667	128	227	372	21.7
100 to 174 acres.....	922	840	170	347	548	24.0
175 to 259 acres.....	1,268	1,100	219	486	736	24.0
260 to 499 acres.....	1,714	1,337	290	624	935	23.6
500 to 999 acres.....	2,773	1,825	344	785	1,194	20.8
1,000 acres and over.....	7,370	2,733	755	1,255	1,970	16.3

The group of medium-sized farms, containing from 100 to 174 acres each, comprises a larger percentage of the total farm area and of the value of farm property than does any other group. With the exception of slight variations in the average values of buildings on small farms, the average values of the several forms of farm property advance as the farms increase in size. For farms of less than 100 acres each, the value of the buildings exceeds that of the land and improvements other than buildings,

but for larger farms the land is more valuable than the buildings. For the group of farms containing less than 3 acres each, the average values of farm property per acre are relatively high, as this class includes most of the florists' establishments and many city dairies.

The average gross incomes per acre for the various groups are as follows: Farms under 3 acres, \$108.82; 3 to 9 acres, \$23.94; 10 to 19 acres, \$13.10; 20 to 49 acres, \$7.82; 50 to 99 acres, \$5.34; 100 to 174 acres, \$4.42; 175 to 259 acres, \$3.56; 260 to 499 acres, \$2.90; 500 to 999 acres, \$2.01; and 1,000 acres and over, \$1.22. In considering the high gross income per acre for farms of less than 3 acres, it should be borne in mind that the incomes of the florists' establishments, nurseries, and city dairies, of which this group is largely composed, are determined not so much by the acreage of land used, as by the amount of capital invested in buildings, implements, and live stock, and the amounts expended for labor and fertilizers.

#### FARMS CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

Tables 10 and 11 present the leading features of the statistics relating to farms classified by principal source of income.

If for any farm 40 per cent of the products not fed to live stock consists of hay and grain, the farm is designated a "hay and grain" farm. Should 40 per cent of the products consist of vegetables, the farm is designated a "vegetable" farm. The farms of the other groups are classified in the same manner. A "miscellaneous" farm is one whose operator does not derive his principal income from any single class of farm products. Farms which yielded no income in 1899 are classified according to the agricultural operations upon other farms in the same locality.

TABLE 10.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME, WITH PERCENTAGES.

PRINCIPAL SOURCE OF INCOME.	Number of farms.	NUMBER OF ACRES IN FARMS.			VALUE OF FARM PROPERTY.	
		Average.	Total.	Per cent.	Total.	Per cent.
The State.....	59,299	106.2	6,299,946	100.0	\$122,410,904	100.0
Hay and grain.....	7,453	97.5	728,661	11.5	13,601,110	11.1
Vegetables.....	5,263	101.3	535,611	8.5	12,409,818	10.1
Fruit.....	551	64.2	35,404	0.6	1,075,500	0.9
Live stock.....	15,048	102.1	1,537,083	24.4	28,978,948	23.7
Dairy produce.....	17,740	100.6	1,785,286	28.4	38,761,782	31.7
Flowers and plants.....	65	9.6	625	(1)	293,255	0.2
Nursery products.....	16	78.4	1,254	(1)	84,940	0.1
Miscellaneous.....	13,163	127.5	1,678,022	26.6	27,216,542	22.2

<sup>1</sup> Less than one-tenth of 1 per cent.

TABLE 11.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

PRINCIPAL SOURCE OF INCOME.	AVERAGE VALUES PER FARM OF—					Per cent of gross income on total investment in farm property.
	Farm property, June 1, 1900.				Gross income (products of 1899 not fed to live stock).	
	Land and improvements (except buildings).	Buildings.	Implementments and machinery.	Live stock.		
The State.....	\$832	\$795	\$148	\$289	\$460	22.3
Hay and grain.....	891	785	86	113	254	13.9
Vegetables.....	1,087	747	205	819	781	31.0
Fruit.....	810	874	113	155	351	18.0
Live stock.....	710	760	144	312	427	22.2
Dairy produce.....	825	859	157	343	475	21.7
Flowers and plants.....	1,898	2,338	209	67	2,181	48.3
Nursery products.....	3,425	1,475	359	50	2,988	56.3
Miscellaneous.....	840	790	156	282	478	23.1

Only about one-half of the 7,453 "hay and grain" farms report any domestic animals, and many report no crops except small quantities of hay or grain. These facts explain the relatively small percentage of gross income shown in Table 11 for farms of this group.

For the several classes of farms the average values per acre of products not fed to live stock are: Flowers and plants, \$226.84; nursery products, \$38.13; vegetables, \$7.18; fruit, \$5.45; dairy produce, \$4.72; live stock, \$4.18; miscellaneous, \$3.75; hay and grain, \$2.60.

The wide variations in the averages and percentages of gross income are largely due to the fact that in computing gross income no deductions are made for expenses involved in operation. For florists' establishments, nurseries, and market gardens the average expenditure for such items as labor and fertilizers represents a far larger percentage of the gross income than in the case of "hay and grain," "live stock," or "miscellaneous" farms. If it were possible to present the average net incomes, the variations shown would be comparatively slight.

#### FARMS CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

Tables 12 and 13 present data relating to farms classified by the reported value of products not fed to live stock.

TABLE 12.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK, WITH PERCENTAGES.

VALUE OF PRODUCTS NOT FED TO LIVE STOCK.	Number of farms.	NUMBER OF ACRES IN FARMS.			VALUE OF FARM PROPERTY.	
		Average.	Total.	Per cent.	Total.	Per cent.
The State.....	59,299	106.2	6,299,946	100.0	\$122,410,904	100.0
\$0.....	266	34.6	9,194	0.2	205,870	0.2
\$1 to \$49.....	1,842	39.1	71,982	1.1	1,636,920	1.3
\$50 to \$99.....	3,886	43.8	189,436	3.0	3,787,910	3.1
\$100 to \$249.....	16,215	69.0	1,118,265	17.8	21,035,890	17.2
\$250 to \$499.....	19,414	103.0	1,999,205	31.7	36,313,420	29.6
\$500 to \$999.....	12,732	148.8	1,831,449	29.1	35,856,810	28.9
\$1,000 to \$2,499.....	4,436	207.5	920,587	14.6	19,809,790	16.2
\$2,500 and over.....	508	314.6	159,818	2.5	4,264,794	3.5

TABLE 13.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

VALUE OF PRODUCTS NOT FED TO LIVE STOCK.	AVERAGE VALUES PER FARM OF—					Per cent of gross income on total investment in farm property.
	Farm property, June 1, 1900.					
	Land and im- prove- ments (except build- ings).	Build- ings.	Imple- ments and ma- chinery.	Live stock.	Gross income (products of 1899 not fed to live stock).	
The State-----	\$332	\$795	\$148	\$289	\$460	22.3
\$0.....	307	834	37	94	32	3.7
\$1 to \$49.....	363	435	87	54	75	7.7
\$50 to \$99.....	401	455	44	75	178	13.7
\$100 to \$249.....	527	549	80	141	865	19.5
\$250 to \$499.....	724	742	137	267	694	25.0
\$500 to \$999.....	1,105	1,020	215	437	1,422	31.8
\$1,000 to \$2,499.....	1,831	1,549	347	689	3,550	42.3
\$2,500 and over.....	4,011	2,597	613	1,174		

The absence of income in the first group is due in part to the inability of the enumerators to secure complete reports for certain farms where changes in proprietorship had occurred shortly prior to the date of enumeration. Frequently the persons in charge of such farms, June 1, 1900, could not give definite information concerning the products of the preceding year. The same statement is also true of some of the farms with reported incomes of less than \$100. To this extent the reports fall short of giving a complete exhibit of farm income in 1899. Some of the farms reporting little or no income are doubtless summer homes or country estates held for pleasure and not for profit.

#### LIVE STOCK.

At the request of the various live-stock associations of the country, a new classification of domestic animals was adopted for the census of 1900. The age grouping for neat cattle was determined by their present and prospective relations to the dairy industry and the supply of meat products. Horses and mules are classified by age, and neat

cattle and sheep by age and sex. The new classification permits a very close comparison with the figures published in previous census reports.

Table 14 presents a summary of live-stock statistics.

TABLE 14.—NUMBER OF DOMESTIC ANIMALS, FOWLS, AND BEES ON FARMS, JUNE 1, 1900, WITH TOTAL AND AVERAGE VALUES, AND NUMBER OF DOMESTIC ANIMALS NOT ON FARMS.

LIVE STOCK.	Age in years.	ON FARMS.			NOT ON FARMS.
		Number.	Value.	Average value.	Number.
Calves.....	Under 1.....	61,794	\$411,104	\$6.65	1,522
Steers.....	1 and under 2.....	15,508	218,758	14.11	896
Steers.....	2 and under 3.....	11,156	266,452	23.88	174
Steers.....	3 and over.....	11,442	582,828	50.94	168
Bulls.....	1 and over.....	6,995	152,984	21.87	82
Heifers.....	1 and under 2.....	45,877	821,551	18.54	1,179
Cows kept for milk.....	2 and over.....	173,592	5,060,048	29.15	11,956
Cows and heifers not kept for milk.....	2 and over.....	12,488	272,017	21.79	146
Colts.....	Under 1.....	2,834	78,687	27.71	150
Horses.....	1 and under 2.....	3,955	201,548	50.96	165
Horses.....	2 and over.....	98,510	6,778,904	68.12	83,690
Mule colts.....	Under 1.....	92	2,675	29.08	8
Mules.....	1 and under 2.....	21	970	46.19	1
Mules.....	2 and over.....	240	15,885	66.19	41
Asses and burros.....	All ages.....	48	769	16.02	13
Lambs.....	Under 1.....	167,908	364,706	2.17	2,045
Sheep (ewes).....	1 and over.....	240,717	709,720	2.95	4,820
Sheep (rams and wethers).....	1 and over.....	11,496	42,057	3.66	228
Swine.....	All ages.....	79,018	515,015	6.53	9,545
Goats.....	All ages.....	279	1,091	3.91	36
Fowls: <sup>1</sup>					
Chickens.....		1,564,853			
Turkeys.....		6,437	756,153		
Geese.....		4,568			
Ducks.....		9,708			
Bees (swarms of).....		10,857	51,459	4.74	
Value of all live stock.....			17,106,034		

<sup>1</sup> The number reported is of fowls over 3 months old. The value is for all, old and young.

<sup>2</sup> Including Guinea fowls.

The total value of all live stock on farms was \$17,106,034. Of this amount 41.3 per cent represents the value of horses; 29.6 per cent, that of dairy cows; 14.8 per cent, that of other neat cattle; 6.5 per cent, that of sheep; 4.4 per cent, that of poultry; 3.0 per cent, that of swine; and 0.4 per cent, that of all other live stock.

As in the other New England states, the value of steers 3 years old and over is comparatively high, this class including the valuable working oxen still used in some parts of the state. The number of these animals is rapidly decreasing. In 1850, 83,893 working oxen were reported; in 1860, 79,792; in 1870, 60,530; in 1880, 43,049; in 1890, 33,105. In 1900 the total number of steers over 2 years old was only 22,598, and it is probable that many of these were not working oxen.

No reports were received concerning the value of live stock not on farms, but it is probable that such animals have higher average values than those on farms. Allowing the same averages, however, the total value of all live stock in the state, exclusive of the poultry and bees not on farms, is approximately \$19,897,000.

#### CHANGES IN LIVE STOCK ON FARMS.

The following table shows the changes since 1850 in the number of the most important domestic animals.

TABLE 15.—NUMBER OF SPECIFIED DOMESTIC ANIMALS ON FARMS: 1850 TO 1900.

YEAR.	Dairy cows.	Other neat cattle.	Horses.	Mules and asses.	Sheep. <sup>1</sup>	Swine.
1900.....	173,592	165,255	106,299	401	252,213	79,018
1890.....	167,278	141,892	109,156	278	370,484	91,297
1880.....	160,845	183,576	87,848	298	565,918	74,869
1870.....	139,269	203,802	71,514	336	434,666	45,760
1860.....	147,314	229,619	60,637	104	452,472	54,788
1850.....	133,556	209,783	41,721	55	451,577	64,598

<sup>1</sup> Lambs not included.

With the exception of the decade 1860-1870 the number of dairy cows has increased steadily for fifty years, the gain in the last decade having been 16,314, or 10.4 per cent. The number of "other neat cattle" given for 1900 includes 61,794 calves. It is uncertain whether calves were included with "neat cattle" in census reports prior to 1900. If not, their number in that year should be deducted when making comparisons with reports for previous years, in which case a decrease would be shown for the last decade in the number of "other neat cattle" corresponding with that shown for each succeeding decade since 1860.

The number of horses more than doubled from 1850 to 1890, but in the last decade there was a small decrease. The number of sheep remained nearly constant until 1880, since which date there has been a rapid decrease, amounting in the last ten years to 31.9 per cent. Between 1850 and 1890 the number of swine fluctuated slightly with a general upward tendency, but in the last decade there was a decrease of 13.4 per cent.

In comparing the poultry report for 1900 (see Table 14) with that for 1890, it should be borne in mind that in 1900 the enumerators were instructed not to report fowls less than 3 months old, while in 1890 no such limitation was made. This fact explains, in part, the decrease shown in the number of all kinds of fowls except chickens, and the smallness of the increase shown for these fowls. Compared with the figures for 1890, the present census shows decreases in the number of fowls as follows: Ducks, 64.0 per cent; turkeys, 57.8 per cent; and geese, 37.2 per cent. The number of chickens increased 10.9 per cent.

#### ANIMAL PRODUCTS.

Table 16 is a summarized exhibit of the animal products of agriculture.

TABLE 16.—QUANTITIES AND VALUES OF SPECIFIED ANIMAL PRODUCTS, AND VALUES OF POULTRY RAISED, ANIMALS SOLD, AND ANIMALS SLAUGHTERED ON FARMS IN 1899.

PRODUCTS.	Unit of measure.	Quantity.	Value.
Wool.....	Pounds.....	1,473,013	\$318,585
Mohair and goat hair.....	Pounds.....	105	21
Milk.....	Gallons.....	199,586,188	8,182,344
Butter.....	Pounds.....	16,174,173	
Cheese.....	Pounds.....	425,102	
Eggs.....	Dozens.....	13,304,161	
Poultry.....			2,038,225
Honey.....	Pounds.....	200,080	956,468
Wax.....	Pounds.....	6,570	34,461
Animals sold.....			2,371,717
Animals slaughtered.....			1,258,694
Total.....			15,159,415

<sup>1</sup> Includes all milk produced.

The animal products of the state in 1899 were valued at \$15,159,415, or 40.8 per cent of the value of all farm products and 55.6 per cent of the gross farm income. Of the above amount, 54.0 per cent represents the value of dairy products; 23.9 per cent, that of animals sold and of animals slaughtered on farms; 19.8 per cent, that of poultry and eggs; and 2.3 per cent, that of wool, mohair, honey, and wax.

#### DAIRY PRODUCE.

The steady growth of population in Maine and the increasing popularity of its summer resorts have largely increased the demand for dairy produce in this state. The present importance of this industry is shown by the fact that in 1899 the proprietors of 17,740 farms, or 29.9 per cent of the farms of the state, derived their principal income from dairy produce. The production of milk in 1899 was 41,616,397 gallons greater than in 1889, a gain of 71.8 per cent. The census of 1890 secured no report of the quantity of milk sold, but since 1880 there has been a gain of 329.5 per cent. In every county except Androscoggin, the quantity of milk sold in 1899 was more than three times as great as that sold in 1879.

Of the \$8,182,344 given in Table 16 as the value of all dairy products in 1899, \$2,561,239, or 31.3 per cent, represents the value of such products consumed on the farms of the producers, and \$5,621,105, or 68.7 per cent, the amount realized from sales. Of the latter sum, \$2,278,122 was derived from the sale of 15,979,003 gallons of milk; \$2,272,437, from 11,030,091 pounds of butter; \$1,028,752, from 2,810,733 gallons of cream; and \$41,794, from 365,936 pounds of cheese.



While the quantity of butter made on farms has increased since 1890, that of cheese has rapidly decreased, the production of 1899 being little more than one-half that of 1889 and less than one-fifth that of 1849. The transfer of cheese making from the farm to the factory explains the decrease.

#### POULTRY AND EGGS.

Of the \$2,993,693 given as the total value of the products of the poultry industry in 1899, 68.1 per cent represents the value of eggs, and 31.9 per cent that of poultry raised. The number of dozens of eggs increased 41.8 per cent in the last decade.

#### WOOL.

The northern counties report a larger total production of wool than the southern counties, but show a much smaller number of fleeces per square mile. The production of wool increased steadily from 1850 until 1880, in which year 2,776,407 pounds were reported. Since that date there has been a steady decrease, amounting in the last decade to 20.7 per cent. The average weight of fleeces was 5.3 pounds in 1890 and 5.7 pounds in 1900.

#### HORSES AND DAIRY COWS ON SPECIFIED CLASSES OF FARMS.

Table 17 presents, for the leading groups of farms, the number of farms reporting horses and dairy cows, the total number of these animals, and the average number per farm. In computing the averages presented, only those farms which report the kind of stock under consideration are included.

TABLE 17.—HORSES AND DAIRY COWS ON SPECIFIED CLASSES OF FARMS, JUNE 1, 1900.

CLASSES.	HORSES.			DAIRY COWS.		
	Farms reporting.	Number.	Average per farm.	Farms reporting.	Number.	Average per farm.
Total	49,576	106,299	2.1	49,161	173,592	3.5
White farmers	49,554	106,267	2.1	49,148	173,593	3.5
Colored farmers	22	32	1.5	13	29	2.2
Owners <sup>1</sup>	46,998	100,274	2.1	46,689	164,753	3.5
Managers	578	2,007	3.5	554	3,020	5.5
Cash tenants	1,457	2,884	2.0	1,361	4,083	3.0
Share tenants	545	1,184	2.1	557	1,736	3.1
Under 20 acres	3,262	4,537	1.4	2,921	4,520	1.6
20 to 99 acres	22,217	38,939	1.8	22,584	59,365	2.6
100 to 174 acres	15,723	36,076	2.3	15,459	62,529	4.0
175 to 259 acres	5,367	15,209	2.8	5,250	28,356	5.4
260 acres and over	3,007	11,538	3.8	2,947	18,792	6.4
Hay and grain	3,272	7,142	2.2	2,246	4,761	2.1
Vegetable	4,809	18,091	2.7	4,108	11,463	2.8
Fruit	370	650	1.8	242	648	2.7
Live stock	13,352	27,098	2.0	13,100	39,671	3.0
Dairy	15,982	33,199	2.1	17,740	83,293	4.7
Miscellaneous <sup>2</sup>	11,791	25,119	2.1	11,725	33,756	2.9

<sup>1</sup>Including "part owners" and "owners and tenants."

<sup>2</sup>Including florists' establishments and nurseries, and 1 tobacco farm.

#### CROPS.

The following table gives the statistics of the principal crops grown in 1899.

TABLE 18.—ACREAGES, QUANTITIES, AND VALUES OF THE PRINCIPAL FARM CROPS IN 1899.

CROPS.	Acres.	Unit of measure.	Quantity.	Value.
Corn	16,856	Bushels	645,040	\$325,824
Wheat	6,667	Bushels	116,720	107,356
Oats	108,661	Bushels	3,799,435	1,374,573
Barley	8,809	Bushels	252,350	137,448
Rye	611	Bushels	9,290	6,126
Buckwheat	25,292	Bushels	468,320	155,836
Flaxseed	2	Bushels	16	22
Clover seed		Bushels	519	2,956
Grass seed		Bushels	417	851
Hay and forage	1,270,254	Tons	1,136,774	10,641,546
Tobacco	(1)	Pounds	150	14
Hops	(1)	Pounds	60	6
Peanuts	1	Bushels	22	46
Dry beans	10,252	Bushels	137,290	290,885
Dry pease	2,300	Bushels	35,991	44,618
Potatoes	71,705	Bushels	9,813,748	3,711,999
Onions	168	Bushels	44,489	88,160
Chicory	29	Pounds	64,820	217
Miscellaneous vegetables	19,844			1,207,075
Maple sugar		Pounds	5,500	643
Maple sirup		Gallons	16,024	15,280
Small fruits	1,036			157,679
Grapes	251	Centals	2,758	87,584
Orchard fruits	2117,322	Bushels	1,438,919	483,634
Nuts				593
Forest products				2,652,249
Flowers and plants	71			155,131
Seeds	6			3,082
Nursery products	106			46,207
Miscellaneous				5,371
Total	1,660,103			21,954,054

<sup>1</sup>Less than 1 acre.

<sup>2</sup>Estimated from number of vines or trees.

<sup>3</sup>Including value of raisins, wine, etc.

<sup>4</sup>Including value of cider, vinegar, etc.

Of the total value of crops, hay and forage contributed 48.5 per cent; vegetables, including potatoes and onions, 22.6 per cent; forest products, 12.1 per cent; cereals, 9.7 per cent; fruits and nuts, 4.5 per cent; and all other products, 2.6 per cent.

Owing to a more favorable season, the yield per acre of most crops in 1899 was greater than in 1889. The season of 1899 was especially favorable to the growing of potatoes, the yield per acre having been 136.7 bushels while in 1889 it was but 105.8 bushels. The average yield per acre of hay and forage was 0.9 ton, and the average values, \$9.36 per ton and \$8.38 per acre. The acreage devoted to hay and forage was 76.5 per cent of the total area in crops, but yielded only 48.5 per cent of the total receipts. The average values per acre of other crops were as follows: Flowers and plants, \$2,185; nursery products, \$436; onions, \$227; small fruits, \$152; grapes, \$149; miscellaneous vegetables, \$61; potatoes, \$52; cereals, \$13; and orchard fruits, \$7. The crops yielding the highest returns per acre were grown upon very highly improved land. Their production required a relatively great amount of labor and large expenditures for fertilizers.

## CEREALS.

Table 19 is an exhibit of the changes in cereal production since 1849.

TABLE 19.—ACREAGE AND PRODUCTION OF CEREALS:  
1849 TO 1899.

## PART 1.—ACREAGE.

YEAR. <sup>1</sup>	Barley.	Buck- wheat.	Corn.	Oats.	Rye.	Wheat.
1899.....	8,809	25,202	16,856	108,661	611	6,667
1889.....	11,972	22,395	10,891	121,612	791	4,116
1879.....	11,106	20,185	30,997	78,785	2,161	43,229

<sup>1</sup>No statistics of acreage were secured prior to 1879.

## PART 2.—BUSHELS PRODUCED.

1899.....	252,850	468,320	645,040	3,799,435	9,290	116,720
1889.....	236,262	466,411	380,662	3,668,909	6,664	79,823
1879.....	242,185	382,701	990,633	2,255,575	20,398	665,714
1869.....	653,816	466,635	1,089,838	2,351,354	34,115	278,793
1859.....	802,108	239,519	1,546,071	2,938,939	123,287	288,876
1849.....	151,731	104,523	1,750,056	2,181,037	102,916	296,259

The development of agriculture in the southern part of Maine during the past fifty years has been attended by changes similar to those noted in other New England states, namely, a steady growth in the importance of dairying and market gardening, and a marked decrease in the acreage devoted to cereals.

In the northern part of the state, where agriculture has been more recently developed, very different conditions prevail. The distance from city markets, while retarding the development of special branches of husbandry, has favored general farming, and the production of such cereals as are adapted to the soil and climate has been steadily and rapidly increasing for several decades. This is especially true in Aroostook county, where the total area in cereals increased 37,116 acres, or 82.6 per cent, from 1879 to 1899, while for the remainder of the state there was a decrease of 57,233 acres, or 40.3 per cent. In 1880 Aroostook county reported 24.0 per cent of the total acreage in cereals; in 1890, 33.5 per cent; and in 1900, 49.2 per cent, or approximately one-half.

Of the total area in cereals in 1899, 65.1 per cent was devoted to oats; 15.1 per cent, to buckwheat; 10.1 per cent, to corn; 5.3 per cent, to barley; 4.0 per cent, to wheat; and 0.4 per cent, to rye.

Most of the barley is raised in the southern counties, and the total acreage of this grain decreased 26.4 per cent in the last decade. The northern counties of Aroostook, Penobscot, and Piscataquis show a gain of 48.7 per cent, while all others show decreases.

In 1900, 83.7 per cent of the total area devoted to buckwheat was in Aroostook county, and 12.7 per cent in the other 3 northern counties. The gain of 12.9 per cent in the last ten years in the acreage of this grain has resulted entirely from the increases in these 4 counties.

The northern counties report very little corn, Aroostook county only 27 acres, but in all others there were substantial increases in the last decade, amounting to 54.8 per cent for the state.

Aroostook county reports 48.4 per cent of the total acreage in oats, and Penobscot and Somerset counties, 22.7 per cent. For the last decade Aroostook shows a gain of 16,885 acres, or 47.3 per cent, but all other counties show decreases, resulting in a net loss for the state of 10.6 per cent.

Very little attention is given to rye. Aroostook county reports 58.6 per cent of the product and shows a gain in the last decade of 102.3 per cent. Oxford county, which reported 54.9 per cent of the total acreage in 1890, reports but 5.4 per cent in 1900.

The area in wheat in Aroostook county increased from 1,910 acres in 1889 to 5,759 acres in 1899. For the balance of the state there was a decrease from 2,206 to 908 acres. In 1889 Aroostook county had 46.4 per cent of the acreage devoted to this grain, and in 1899, 86.4 per cent. The gain for the state was 62.0 per cent.

The acreage given for cereals does not include 14,212 acres of grain cut green for hay, nor 12,494 acres devoted to corn, nonsaccharine sorghum, and similar crops, grown for forage or ensilage.

## ORCHARD FRUITS.

The changes in orchard fruits since 1890 are shown in the following table:

TABLE 20.—ORCHARD TREES AND FRUITS: 1890 AND 1900.

FRUITS.	NUMBER OF TREES.		BUSHELS OF FRUIT.	
	1900.	1890.	1899.	1889.
Apples.....	4,184,781	3,003,109	1,421,773	3,071,471
Apricots.....	84	186		8
Cherries.....	11,597	10,686	1,550	364
Peaches.....	9,592	1,607	1,895	217
Pears.....	39,902	34,331	11,200	13,141
Plums and prunes.....	29,001	14,394	2,282	1,291

The value of the orchard products of 1899 was \$833,634. The counties whose orchard products were valued at over \$50,000 were: York, \$150,297; Cumberland, \$94,087; Kennebec, \$80,991; Penobscot, \$70,486; Androscoggin, \$66,183; Oxford, \$65,925; and Waldo, \$63,826.

In 1890, 98.0 per cent, and in 1900, 97.9 per cent of all fruit trees in the state were apple trees. All counties report increases since 1890 in the number of trees, the rate of gain for the state being 39.3 per cent. The greatest relative gain was in Aroostook county. In 1899 there were manufactured on farms 11,906 barrels of cider, 2,161 barrels of vinegar, and 26,170 pounds of dried fruit.

Very little attention is given to apricots. The number of cherry trees has increased slightly, but many counties show decreases. Peach and nectarine trees are few in number, though a large percentage of gain is reported in all parts of the state. A large percentage of the pear trees reported are in the southwestern counties. The gain of 16.2 per cent for the state is, however, quite generally distributed, the only marked decreases being in Cumberland and Franklin counties. Plum and prune

trees have more than doubled in number, the only counties reporting losses being Androscoggin, Franklin, and Oxford. In addition to the trees given in Table 20, unclassified fruit trees to the number of 3,244 are reported, with a yield of 219 bushels of fruit.

The quantity of fruit produced in any year is determined largely by the nature of the season. Consequently, comparisons between the crop of 1889 and that of 1899 have little significance, as in the latter year there was only about one-third of a crop of the most important fruits.

#### SMALL FRUITS.

The total area used in the cultivation of small fruits in 1899 was 1,036 acres, distributed among 4,577 farms. The value of the fruits grown was \$157,679, an average of \$34.45 per farm. Of the total area, 512 acres, or 49.4 per cent, were devoted to strawberries, the total production of which was 1,066,860 quarts, grown principally in the southern counties. The acreage and production of other berries were as follows: Blackberries and dewberries, 151 acres and 164,300 quarts; cranberries, 90 acres and 1,554 bushels; currants, 32 acres and 37,080 quarts; gooseberries, 30 acres and 41,230 quarts; raspberries and Logan berries, 131 acres and 214,700 quarts; and other berries, 90 acres and 102,040 quarts.

#### VEGETABLES.

The value of all vegetables grown in the state in 1899, including potatoes and onions, was \$4,957,234. Of this amount, 74.9 per cent represents the value of potatoes. This important crop was reported by 49,548 farmers, or 83.6 per cent of the total number in the state. It is relatively of greatest importance in Aroostook county, where the natural fertility of the soil and the presence of a number of starch factories render the crop an especially profitable one. In 1890 this county reported 33.5 per cent of the total acreage, and in 1900, 58.5 per cent. The average area per farm devoted to potatoes in 1899 was 6.6 acres for Aroostook county, and but 0.7 acre for the remainder of the state. The acreage of potatoes in Aroostook county in 1899 constituted 10.8 per cent of the total improved land; the average yield per acre was 154.1 bushels, while for the rest of the state it was but 112.3 bushels. Aside from the land devoted to potatoes and

onions, 19,844 acres were used in the growing of miscellaneous vegetables. Of this area the products of 9,541 acres were not reported in detail. Of the remaining 10,303 acres, concerning which detailed reports were received, 8,252 acres were devoted to sweet corn; 594, to cabbages; 405, to turnips; 223, to cucumbers; 165, to green pease; 162, to tomatoes; and 502 to other vegetables.

#### FLORICULTURE.

The proprietors of 65 of the 93 establishments where flowers are grown for the market make commercial floriculture their principal business. They have invested a capital of \$293,255, of which \$123,375 represents the value of land; \$151,940, that of buildings; \$13,610, that of implements; and \$4,330, that of livestock. In 1899 they raised flowers and plants valued at \$134,232 and other products valued at \$8,910, making a total product of \$143,142 or \$229.03 for each of the 625 acres used. During the same year they expended \$2,830 for fertilizers and \$39,515 for labor.

These 65 florists' establishments have 653,861 square feet of glass surface, equivalent to 490,396 square feet of land under glass. In addition, 131 farms have 693,714 square feet of land under glass, making the total for the state, 1,184,110 square feet.

#### LABOR AND FERTILIZERS.

The total expenditure for labor on farms in 1899, including the value of board furnished, was \$2,667,260, an average of \$45 per farm. The average was highest on the most intensively cultivated farms, being \$789 for nurseries, \$608 for florists' establishments, \$33 for market gardens, \$47 for dairy farms, \$45 for fruit farms, \$35 for live-stock farms, and \$31 for hay and grain farms. Managers expended, on an average, \$166; owners, \$43; share tenants, \$35; and cash tenants, \$34 per farm. White farmers expended \$45 per farm, and colored farmers \$13.

Fertilizers purchased in 1899 cost \$819,680, an average of \$14 per farm, and an increase since 1890 of 79.6 per cent. The average expenditure was greatest for nurseries and least for hay and grain farms, the amounts being \$152 and \$6, respectively. For vegetable farms the average was \$52; for florists' establishments, \$44; for fruit farms, \$10; for dairy farms, \$11; and for live-stock farms, \$9.